# Exhibit B

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1	UNITED STATES DISTRICT COURT
2	NORTHERN DISTRICT OF CALIFORNIA
3	
4	
5	JON HART, ALEX DANIELS AND )
	JOSHUA DUNLAP, )
6	)
	Plaintiffs, )
7	) Case No.
	vs. ) 4:20-cv-03842
8	) JST(JSC)
	TWC PRODUCT AND TECHNOLOGY LLC, )
9	)
	Defendant. )
10	)
11	
12	
13	CONFIDENTIAL
14	VIDEOTAPED VIDEOCONFERENCE DEPOSITION
15	OF SERGE EGELMAN, Ph.D.
16	FRIDAY, JULY 22, 2022
17	
18	
19	
20	
21	JOB NO.: 5331337
22	(Pages 1 through 121)
	REPORTED BY TARA SANDFORD, CSR NO. 3374, RPR
23	
24	(Pages 122 through 189)
25	REPORTED BY MONICE CAMPBELL, CSR NO. 14171, RMR, CRR
	Page 1

1	today?
2	A. Correct.
3	Q. Did you get a copy of the protective order in
4	this case?
5	A. Probably. I mean, I signed it, so I must have.
6	I signed it so, therefore, I certainly have saved a copy
7	of it.
8	Q. Okay. So you remember signing the protective
9	order?
10	A. I believe so, yes. Do you want me to
11	double-check?
12	Q. No. I'll take your word for it. That's fine.
13	I just want to make sure you're aware of the protective
14	order and the obligations thereunder.
15	Were you asked to make any assumptions in
16	preparing your report?
17	A. I was asked to examine the opposing reports and
18	assess them and that was it. That's what I did.
19	Q. Okay. So counsel didn't ask you to make any
20	assumptions?
21	A. Not that I recall.
22	I guess one assumption is I was given a subset
23	of the data to look at, so I didn't look at exactly the
24	same data as the that the Snow report used. So I'm
25	assuming the data I was shown is consistent with the
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1 rest of the data, but I quess that would probably be the 2 only assumption. What's your understanding of the alleged 3 Ο. conduct that plaintiff contends was improper in this 4 case? 5 6 That the disclosures in the app were misleading with regard to how location data would be used. 7 8 Ο. And when you say the disclosures in the app, you mean the TWC app? 9 10 Α. Yes. And are you referring to both the Android 11 12 disclosure and the -- well, let me back up. 13 When you say disclosure, are you referring to the location access permission prompt? 14 Specifically, I mean, the one -- there's 15 Α. Yeah. the one on iOS, but I believe there was also some text 16 17 on a splash screen in the Android version. I would have 18 to go back to the screenshots in my report to -- to look. 19 20 Okay. And when you say the disclosures in the app were misleading, you're -- and then you responded 21 22 that it was the -- there's the location access prompt in 2.3 iOS and then some text on a splash screen in the Android version. 24 25 You understand that there is a -- like a Page 11

1 section. What documents did you review --2 Let me put it this way: Which documents did 3 you rely on to prepare your report? 4 The -- the reports that I was responding to. 5 Beyond that, there was, you know, in terms of -- I guess 6 it depends on your definition of document. But, I mean, 7 I looked at the other reports, and I looked at, you know, some subset of the data that was considered in 9 10 drafting those reports. 11 Typically, these reports under the rules are 12 supposed to have a -- a section that lists documents 13 relied on. And we just noticed that your report doesn't 14 include that. You have two reports and -- so you relied on 15 Dr. Snow's report, Dr. Hanssens' report, the subset of 16 the data that you reviewed. We will come back to that. 17 18 What else did you rely on? My expertise. As an academic, I review upward 19 20 of 100 papers a year as part of the peer-review process for international journals and conferences. 21 And, you know, generally in writing, you know, 22 2.3 a review as part of the peer-review process, you don't necessarily include, you know, citations to every 24 25 reference material when the issues that you are pointing Page 16

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1 out are -- should be obvious to another, you know, trained expert in the field. 2 Certainly, you include citations if there is 3 some, you know, you know, relevant, you know, 4 contemporary research that -- that needs to be included. 5 But in terms of, you know, bias -- why experimental 6 7 design is flawed, it's just, you know, usually in my day job that's just not usually done in a review of a paper when the issues are obvious. 9 10 I notice you don't include any citations to any other authority in your report; correct? 11 12 No, because, I mean, again, most of the issues Α. that I -- that I outlined, I think any other expert, 13 14 they should be obvious to. What about to a court? 15 Ο. MR. PRICE: Object to the form. 16 17 You can answer. 18 THE WITNESS: Maybe that was a failure on my 19 I'm happy to -- I am happy to revise the report with citations to all of the issues that I 20 outlined. 21 MR. BROOME: No, thanks. 22 2.3 Q. Okay. Aside from the Snow report, the Hanssens report, the subset data that you reviewed and articles 24 that you have reviewed, did you rely on anything else in 25 Page 17

1 preparing your report? Examining the apps. But is that considered a 2 Α. document? So, you know, the main thing was looking at 3 the data that was collected, looking at their methodologies, and looking at what was actually shown in 5 6 the apps. Q. Okay. And I think in your report you said -you examined several prior versions of the iOS and Android apps. 9 10 Uh-huh. I have screenshots of them in there, a couple of the versions. 11 12 Where did you get those? Q. I mean, these are publicly released apps. 13 Α. 14 Q. The prior versions are still available online? Yeah, there are archives on the Internet where 15 Α. you can download prior versions of publicly released 16 17 apps. Even the iTunes store there is a way of 18 downloading prior versions. But I mean, if you dispute the contents of the 19 disclosures and the versions I evaluated, I mean, 20 clearly your client has the original versions. And they 21 22 can introduce, you know, different disclosures if they 2.3 think that I got something wrong in terms of what

Q. Would you defer to that?

versions showed which disclosures.

24

25

1 Α. What do you mean? I mean, if our client did introduce different 2 Q. versions and said, you know, this is the prompt that was 3 in effect during a certain period of time based on their 4 records, would you defer to that? 5 MR. PRICE: Object to the form. 6 THE WITNESS: I think if they made -- I think 7 if they made the app binaries available, you know, so they could be independently tested to see what 9 10 disclosures were present, and if those differed from the same app binaries that I was able to find and produce 11 12 disclosures from, then I think that would be -- that 13 would be a reasonable thing to do. But, you know, clearly your client hired two 14 experts who said that this is the only disclosure that's 15 16 relevant during this time period, and that's empirically 17 false. 18 BY MR. BROOME: Is it your understanding that Ο. 19 those two experts were giving their expert opinion as to 20 what --I don't know --21 Α. Or were they just making assumptions? 22 Q. 2.3 Α. I don't know how they arrived at that, but both reports focus on a single disclosure and imply that 24 that's the only disclosure that's at issue and that 25 Page 19

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1 disclosure somehow generalizes to all the disclosures available during the class period. That's what's in 2 3 their reports. How they arrived at that, I honestly couldn't 4 tell you. I didn't write those reports. 5 6 Where did you -- exactly where on the Internet 7 did you find the old versions? I couldn't tell you off the top of my head but, you know, for -- certainly for -- there are many sites 9 10 for Android that do this. There are a few for iOS and, again, even the iTunes store. There used to be a way 11 12 that you can use the official iTunes store to download 13 earlier versions. 14 When you say there used to be a way, when did that stop, to the best of your knowledge? 15 16 I -- I don't -- I mean, as of right now, I have 17 not, you know, done it again to download older versions 18 directly from the iTunes store, so I don't know if you can still do that or not. 19 At the time that I did it, I was able to get --20 download versions of the app directly from the iTunes 21 store so that I could then look at the historical 22 versions of the disclosures. 2.3 Okay. When did you do that? 24 Q. 25 I don't recall off the top of my head. Α.

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1 All right. And the versions that you downloaded were not versions that were produced in this 2 case? 3 Again, it didn't come directly from your 4 client, but this is software that they publicly 5 released. And so for them to be surprised that someone 6 found software -- it seems odd that they are surprised 7 that someone found software they publicly released. 8 9 If they dispute the content, you know, of the 10 disclosures, then they should produce the binaries so they could be evaluated to see whether the disclosures 11 12 that I captured were incorrect. You know, that's 13 empirical. Someone can answer that question. 14 Q. Which versions did you download? I don't recall off the top of my head. But I 15 went through a sequence to look at whether -- you know, 16 17 when the disclosures changed based on the version and 18 approximate release date. And the versions that you downloaded are not 19 20 reflected in your report; right? I didn't mention all of the versions. 21 mentioned that it is incorrect in the Hanssens and the 22 2.3 Snow report to say that this is the only disclosure that was shown to users of this app during the time period. 24 25 You said you didn't mention all the versions. Q.

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1	You didn't mention any of the versions that you tested;
2	right?
3	MR. PRICE: Object to the form.
4	THE WITNESS: I reported time periods during
5	the class when the disclosures differed from the
6	disclosures that are reflected in both of those reports.
7	Q. BY MR. BROOME: But you didn't actually say in
8	your report which versions you tested; correct?
9	MR. PRICE: Object to the form.
10	THE WITNESS: I didn't include the version
11	number. I included the approximate release dates when
12	certain disclosures were present.
13	Again, I'm happy to amend it with I can
14	amend the report with citations and version numbers, if
15	that would be helpful, but it seems a little bizarre,
16	given it's your client that produced the software, and
17	they clearly have the original copies. And if they
18	dispute the screenshots I made, they can certainly share
19	the binaries so others could make screenshots.
20	Q. BY MR. BROOME: Did you review the Complaint in
21	this action?
22	A. Yeah, I believe so.
23	Q. Which version?
24	A. I honestly don't remember. As a matter of
25	course, whenever I'm contacted about one of these cases,
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1 location to be collected, that's -- that's why -- that's something that an experiment would determine. 2 Do you believe that the prompts on the 3 Ο. left-hand side and the middle of Figure 1 are materially 4 different? 5 MR. PRICE: Object to the form. 6 You can answer. 8 THE WITNESS: My personal opinion, yes. use different language. I mean, personalization, you 9 10 know, might be some, as for many people, targeted advertising. That is why focusing on whether or not 11 12 personalization, you know, whether the message using 13 personalization was effective I think is a bit of a red 14 herring here because that seems like it's likely to mislead. 15 16 But, again, that's a personal opinion, and that's something that could be answered by real data if 17 18 you actually did a proper, you know, scientifically rigorous study. But that wasn't done, so it is hard to 19 20 draw any conclusions. BY MR. BROOME: So the middle prompt in Figure 21 1 says, "You'll get personalized local weather data 22 alerts and forecasts." 2.3 And your view is that a user might associate 24 25 the words "personalized" with "advertising"? Page 27

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1	MR. PRICE: Object to the form. Outside the
2	scope.
3	THE WITNESS: Potentially. I'm speculating,
4	but that's the type of hypothesis that one would test
5	with a controlled experiment. But because a controlled
6	experiment wasn't properly done, it's just speculation
7	about what people are likely to interpret that to mean.
8	Q. BY MR. BROOME: What is AppCensus?
9	A. AppCensus is a company that was spun off of my
10	research that does privacy analysis of mobile apps.
11	Q. Are you aware of an article titled "Your App
12	Knows" "Apps Know Where You Were Last Night and
13	They're Not Keeping It a Secret," published in the New
14	York Times on December 10, 2018?
15	A. Yeah. That used that used some of my data.
16	I was on background.
17	Q. Right. You were consulted for the article?
18	A. Yep.
19	Q. Do you recall another article published in the
20	New York Times titled "How the Times Analyzes Location
21	Tracking Companies"?
22	A. I think that, yes, and that talked about using
23	my data to write the article.
24	Q. We talked earlier about how the there's an
25	Android prompt and then there's an iOS prompt, and you
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1	understand that the language used on those prompts is
2	different; right?
3	A. Yes.
4	Q. And the Android prompts, there's no purpose
5	string; right?
6	A. (Nods head affirmatively.)
7	Q. It just asks question, you know, basically just
8	asks permission to access location?
9	A. Right.
10	Q. Do you have an understanding as to whether app
11	developers during the relevant period were able to
12	modify that Android prompt?
13	MR. PRICE: Object to the form.
14	THE WITNESS: The prompt that is on the Android
15	is drawn by the operating system, and developers cannot
16	alter that.
17	Whereas, on iOS, developers can optionally
18	provide what's called a purpose string where it's a
19	sentence that gets included in the system drawn prompt
20	that has the developers' message about why they want
21	access to the data.
22	I studied this, I guess, about 10 years ago. I
23	have a published paper on this, on the purpose strings
24	when Apple first introduced them.
25	

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2.3

Q. BY MR. BROOME: With respect to your comments on Dr. Snow's report, do you have any opinions or criticisms about Snow's -- Dr. Snow's report with respect to the portions that relate to the Android version of the app?

MR. PRICE: Object to the form.

THE WITNESS: I didn't read Snow's report too closely because there were so many inaccuracies at the beginning with regard to the iOS data collection that I thought that was disqualifying enough and that it wasn't really worth the time to read the rest of the report because, you know, for instance, you know, he focuses on, again, a single prompt and assumes -- and implies in his report that's the only prompt that users saw, which is not the case.

But worse, what's not said in the report, is based on the log data, it's not clear if you can deduce which prompt was shown to a user and when. Because without looking at what version of, you know, iOS and what version of the app they have installed in doing his analysis and whether or not a user with that unique identifier has seen the prompt for the first time, it's really impossible to say from just the log data that he looked at what prompts users were shown and when. And therefore, it's -- the rest of the report just falls

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1 why I said, you know, most of -- you know, I focus on the prompts that did change more frequently and not just 2 the Blue Screen. 3 BY MR. BROOME: Right. But you understand that 4 Q. Dr. Snow's opinion is not focused on how users reacted 5 to the prompt that is at issue in this case. He is 6 7 looking at how users, the entire user base changed in terms of location-sharing preferences, downloads and 8 uninstalls after certain events, including the launch of 9 10 the January 25, 2019, prompt and the April 2019 Blue Screen; right? 11 12 MR. PRICE: Object to form. 13 You can answer. 14 THE WITNESS: Yeah, I understand that. But, like, the case is not limited to what happened after 15 There were disclosures prior to 2019 that 16 17 prompted TWC to change the disclosures. 18 Ο. BY MR. BROOME: But if one is looking at how users change in terms of the metrics identified in 19 20 Dr. Snow's report after January 25, 2019, and April 24, 2019, it doesn't really matter which version of the 21 prior prompt was in effect during which month, does it? 22 2.3 MR. PRICE: Object to the form. THE WITNESS: I don't know. I guess -- as I 24 said, I didn't focus on that part closely. 25 Page 40

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1 criticisms of his report, and you -- you said in response to one of my questions, "If you want me to 2 amend the report with other issues, I can read this in 3 more detail and highlight other issues. Given that the 4 iOS part, he's commenting on what disclosures from the 5 pop-ups in iOS, you know, given that is factually wrong, 6 7 and that's -- that it's not possible to tell which disclosures of that part of the report were shown to its users, it is hard to give much credibility to any of the 9 10 other findings in this report either." Do you recall giving that testimony? 11 Α. 12 Yes. And so is it your opinion that there's 13 14 something factually wrong with the report, that the whole report should be disregarded? 15 16 MR. PRICE: Object to the foam. 17 You can answer. 18 THE WITNESS: It depends on circumstances. 19 in this case a big part of the report is this assumption you can identify which disclosures were shown to which 20 users and -- and what their reaction means. Part of 21 that -- part of how he uses that is wrong in that, you 22 2.3 know, it's not clear that you can actually know which iOS users saw which disclosures. 24 25 Given that, it -- that's a pretty big claim, Page 50

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1 and that's why I would be skeptical about the rest but 2 didn't really pay close attention to the rest because, again, I thought that issue was so disqualifying. 3 BY MR. BROOME: And if it turned out that 4 Q. Dr. Snow was correct, and you were wrong regarding the 5 dates in which the prior prompt was in effect, would 6 that mean your whole report should be disregarded? 7 MR. PRICE: Object to the form. 8 THE WITNESS: No, because that's immaterial, 9 10 the specific dates. If I'm -- if I'm wrong about what 11 users saw and -- and how to measure reaction to them, 12 and that's the main thing that my report is contributing, then, yes. But, you know, being wrong 13 14 about the dates isn't really a material error. Yet be -- well . . . 15 BY MR. BROOME: Being wrong about the dates 16 isn't a material error if it's -- if we're talking about 17 18 your report; it is a material error if we are talking 19 about Dr. Snow's report? MR. PRICE: Object to the form. 20 THE WITNESS: No. What is a material error is 21 being able to say from these log files we know exactly 22 2.3 which users were shown which disclosures and what their reactions to those disclosures actually mean. 24 BY MR. BROOME: He doesn't say that? 25 Q. Page 51

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1 opinion. As I said, I looked at the iOS portion. 2 was flawed, so I -- I didn't really pick much of the 3 Android apart. 4 All of the data that was provided to Dr. Snow 5 6 was provided to you; correct? No. Α. Did you ask for it? Α. Yeah. Apparently, there were some issues with 9 10 your folks being able to find the right password to -to decrypt the data. I was told that it is just more of 11 12 the same, and so it didn't seem necessary. 13 But we did decrypt the data. Did you not get Ο. 14 access to the full dataset? I did not get access to the full dataset, no. 15 In Opinion 3, he writes, "On average, users of 16 17 the iOS app share location data with TWC at different 18 rates as compared to users of the Android app, and these relative rates changed over time." 19 Do you see that? 20 21 Α. Okay. Do you dispute that opinion? 22 Q. 2.3 Α. Again, I have no -- I have no basis to really evaluate it either way without looking at the data and 24 making the same calculation. 25

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1 Α. No, I'm not. I am talking about --Hold on. Wait. Wait. Let me finish my 2 Q. 3 question. If we just focus on the launch of these 4 prompts, right, those --5 6 Well, let me ask you this: Do you have any 7 basis to dispute that the L.A. City Attorney Complaint -- filing of the L.A. City Attorney Complaint 8 does not correspond to a material change in user 9 behavior? 10 11 Α. Sorry. What? 12 In 23 Dr. Snow says -- let me go back down 13 here. 27, I think we're at, we're in subparagraph 4 --14 strike that. All right. We will come back to this one. 15 16 Do you still have the prior versions of the app 17 that you downloaded? 18 I actually need to check because I have -- I had a whole bunch of prior versions, that and a bunch of 19 other apps as I was going through and purging files for 20 other related stuff when I came across them and realized 21 22 that, yeah, that I had a lot of apps, old app versions 2.3 sitting around from various other things. 24 Are they downloaded to your personal device Q. 25 or --Page 59

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1	any difference to Dr. Hanssens' results if he used that
2	prompt instead of the purpose string in the prompt in
3	the middle of Figure 1; right?
4	A. My what I'm telling you is that you can't
5	draw any conclusions about people's reactions either way
6	to any of the other prompts without explicitly testing
7	them.
8	MR. BROOME: Okay. Let's load Tab 9, Casey.
9	(Whereupon, Exhibit 3 was marked
10	for identification by the Court Reporter
11	and attached hereto.)
12	Q. BY MR. BROOME: Dr. Egelman, do you have an
13	understanding of what the relevant time period is in
14	this case?
15	MR. PRICE: Object to form.
16	You can answer.
17	Q. BY MR. BROOME: Or the class period?
18	A. No, not the specifics. No. I mean, I gather
19	it was around 2019. I thought it predates that, given
20	the timelines in both the other reports. But in terms
21	of the actual specific date, I would have to go back and
22	look at the Complaint.
23	MR. ADAMS: Dr. Egelman, you will need to
24	refresh your Exhibit Share.
25	THE WITNESS: Oh, I'm sorry. I didn't realize
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1 TWC's uniform conduct and policies impacted thousands of Californians." 2 And then they write, "The inadequate 3 disclosures were functionally uniform and never gave 4 notice of the scope and depth of TWC's practices." 5 6 Do you see that? Α. Uh-huh. Yep. And then it says, "During the relevant period" --9 10 If you go down a bit to line 15, it says, "During the relevant period, the permission prompts for 11 12 iOS users stated 'Either we use your location to provide you with accurate weather data and forecast' or 'you'll 13 14 get personalized local weather data, alerts and forecasts.'" 15 16 If you drop down a line it says, "Android users 17 prompt said, 'Allow the weather channel to access this 18 device's location with options to deny or allow.'" 19 Do you agree those three prompts are all functionally uniform? 20 MR. PRICE: Object to the form. Outside the 21 22 scope. THE WITNESS: No. We went over this. It's 2.3 hard to form any sort of opinion whether those are 24 equivalent to each other without actually doing 25 Page 66

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1	rigorous, you know, studies of it.
2	Q. BY MR. BROOME: Are you aware of any study
3	that's been conducted to support that assertion?
4	MR. PRICE: Object to the form. Outside the
5	scope.
6	THE WITNESS: Which assertion?
7	Q. BY MR. BROOME: The assertion that the
8	disclosures the disclosure excuse me. The
9	assertion that the prompts that are described on page 2
10	of plaintiffs' class certification motion are
11	functionally uniform.
12	MR. PRICE: Object to the form. Outside the
13	scope.
14	THE WITNESS: I guess I'm not sure what is
15	meant by "functionally uniform."
16	Q. BY MR. BROOME: Are you aware of any study or
17	survey that's been conducted to determine whether the
18	prompt language elicits different reactions from
19	different users?
20	MR. PRICE: Object to the form. Outside the
21	scope.
22	THE WITNESS: As I said, my lab performed such
23	a study about a decade ago when these prompts were first
24	released. And we found that the effects of including
25	the prompt resulted in greater compliance rates, but
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1 likely to understand what I understand from these 2 messages as an expert. And so if Dr. Hanssens, to the extent that he's 3 making conclusions about what consumers are going to 4 understand about these, he can't really make those 5 claims without, you know, testing that consumer 6 understanding is identical. Well, when plaintiffs write, "TWC provides Ο. substantially identical representations to all class 9 10 members to obtain access to their location data," you understand they are talking -- they mean they are 11 12 substantially identical to consumers; right? 13 MR. PRICE: Object to the form. Outside the 14 scope. THE WITNESS: I -- I don't know that. 15 BY MR. BROOME: 16 Q. Okay. 17 I mean, as an expert I'm reading -- I can read Α. 18 those as an expert and say that these are identical in substance in that they both omit secondary data uses. 19 Okay. Let's assume, then, that plaintiffs are 20 writing this because they are trying to convince the 21 22 court that consumers would all interpret these 2.3 disclosures to be substantially identical. Is it your opinion that from a consumer's 24 perspective that the prompts in effect during the 25 Page 72

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1	relevant period were substantially identical?
2	MR. PRICE: Object to the form. Outside the
3	scope.
4	THE WITNESS: I don't agree with your premise.
5	Q. BY MR. BROOME: Which is what?
6	A. You said, you know, assuming they are identical
7	to the average consumer. And I'm saying, like, we can't
8	assume that.
9	Q. Yeah, that's what I mean, right. Your opinion
10	is one cannot assume that from a consumer's perspective
11	the prompts in effect during the relevant period were
12	identical?
13	MR. PRICE: Object to the form. Outside the
14	scope.
15	THE WITNESS: From a consumer's perspective
16	without evaluating that, we can't know for sure, no.
17	Q. BY MR. BROOME: All right. Let's go back to
18	your report, Exhibit 1.
19	A. Yep.
20	Q. Page 2.
21	A. Yep.
22	Q. Okay. You write, "Both reports" I'm on the
23	second paragraph. "Both reports focus on the disclosure
24	shown in the center of Figure 1, which tells users that,
25	if allowed, you'll get personalized local weather data,
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1 I think I asked you this before, but just bear 2 with me. You don't remember which device you downloaded 4 the -- the app versions to when you were testing them; right? 5 6 Α. I mean, I have several test devices at home, but I don't -- as I said, when I test the apps, I'll 7 then uninstall them on the devices and whether I keep 8 the binaries around after I do the testing totally 9 10 depends on the circumstances. So I would need to check 11 whether I still have the apps. But again, this seems really silly, given that 12 13 they are apps that were published by your client. 14 Q. What year are the devices that you potentially 15 used? 16 It totally varies. I have, like, 20 or 30 mobile devices here in my office. 17 18 Q. All right. 19 Α. But I mean, I don't -- I don't think anyone is alleging different -- different disclosures were shown 20 based on the device beyond the platform differences. 21 But again, that's -- I mean, that seems 22 23 immaterial to my report in that the whole point of Figure 1 is to just show that there were different 24 25 purpose strings throughout the class period. Page 80

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1 report, I found an online viewer and just pasted a screenshot, rather than just putting the raw text here. 2 But that was after verifying that the data was the same. 3 Q. How did you verify that the data was the same? By looking at it. 5 Α. How much of the data did you look at? 6 Q. I mean, what's in the screenshot here. Α. Certainly, you know, the relevant pieces. But the --I -- I don't think it would be different but, again, 9 10 this is -- this is empirical if you're disputing that, 11 the accuracy of the screenshot. You know, the nice 12 thing about the uniquely identifying data that you 13 collected is that you can take one of these identifiers 14 and search your dataset and see exactly where I pulled this from the dataset that you have. 15 16 Did you review data just for one identifier? 17 I skimmed the data that was given to me, and I Α. 18 looked at what are known as the key value pairs, so the different variable names, to try to make sense of the 19 types of data that were collected. And -- and then I 20 decided to put in a representative screenshot of the 21 data in an easier to read format. 22 2.3 Q. How many files did you look at? I don't remember off the top of my head but, 24 Α. again, you know, this is gigabytes of data, so I looked 25

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And I also don't know I don't know the data
that I wasn't shown. I don't know where that came from
either. Yeah, so I don't know what came from Localytics
and what came from other third parties.
Q. How much time did you spend looking at the
Localytics data?
A. Again, I don't know the sources for all the
data, which data came from which sources, but in terms
of even so, the data analysis, generally I would have
to go to my invoices to look at how much time I spent.
Q. Approximately?
A. As I said, my total involvement in this case, I
think, prior to the deposition is under 20 hours. So,
obviously, it is some subset of that.
Q. Okay. When you say you don't know which data
came from which source, Figure 2 says the data is
transmitted to Localytics from the TWC app.
So at least that screenshot comes from
Localytics data that was provided to you; right?
A. That's what I was told, yes.
Q. And then you're saying that with respect to the
document cited on page 4 of your report, TWC Hart
000010956, you're not sure whether the data in there
came from Localytics or some other source?
A. Correct. I don't know where that data came
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from. It was -- you know, it was data that was consistent with this and that it had unique identifiers for each of the users. I was told it's data that came from TWC, and it also had GPS coordinates in it with five decimals of precision.

Where it came from, I don't know. I didn't ask because that didn't seem relevant. I was told it

Where it came from, I don't know. I didn't ask because that didn't seem relevant. I was told it came -- it was data that the app collected, which seems to be the main material issue.

- Q. When you put the data -- sorry. Do you remember the -- I don't know if I asked you this or not, but do you remember the name of the online viewer that you used?
  - A. For which?

2.3

- Q. In order to review the Localytics data.
- A. I didn't use an online viewer to review the Localytics data. After I found a snippet of data that seemed, you know, interesting for a screenshot, I then pasted it into an online viewer so it would print it in an easier format for the reader of the report.
  - Q. Do you remember the name of that online viewer?
- A. No. I mean, there are many of them online.

  Again, if you are disputing the veracity of the data,
  that is something you can easily check.
  - Q. I am a little more concerned about the data

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1 know, my line of work generally, I'm very familiar with 2 the data interchange formats, and it's very common to see data with these labels refer to these specific data 3 4 types. But, you know, again, your client set the 5 So if you dispute specific things in here, you 6 have the information to do that. 7 You can't say definitively that all the fields Ο. that are reflected in Figure 2 are populated for the 9 10 entire dataset; correct? 11 Α. No. MR. PRICE: Object to form. 12 13 THE WITNESS: No. I actually noticed that 14 sometimes some of these fields are missing, so it's 15 not -- it's not clear why that is the case, but that 16 doesn't surprise me at all. 17 Q. BY MR. BROOME: Okay. Do you see in Figure 2 the fourth field down is "birthdate"? 18 19 Α. Yep. And it says 2016-07-18. 20 Ο. Uh-huh. 21 Α. 22 Q. It obviously doesn't reflect the user's birthdate; right? 23 I don't know what that does or does not 24 25 reflect. Maybe it does reflect the user's birthdate. Page 90

1 Maybe it reflects the birth of the device, when the device was first, you know, bought or turned on. Maybe 2 3 it reflects something else entirely. I have no idea what that particular one reflects. 4 Ο. Okay. 6 Α. But your client certainly does. Are there any other fields in the list -- well, Q. let me ask you this: Is Figure 2 a complete list of all 8 9 fields that are in the dataset? 10 No. As I -- you know, I already said this. 11 It's -- I thought it was somewhat representative and 12 instructive, which is why I chose to make a screenshot 13 of it in particular. But, you know, and I already said 14 some of the fields actually differed from, you know, one data point, so to speak, to the next. 15 16 I mean, if one had the whole dataset, it would 17 be pretty easy to enumerate all of the different fields 18 in there. And certainly -- again, your client, though, 19 created the names and defined those fields. And so what 20 each of these fields represents shouldn't be a mystery 21 to them. 22 Are there any other fields reflected in Figure Q. 23 2 where you're not sure or for which you're not sure 24 what they mean? 25 Any, other than what? Other than the birthdate Α.

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1	Do you see that?
2	A. Uh-huh.
3	Q. Did you do this?
4	A. I mean, I could do it if I had you know, if
5	I had the full dataset in front of me. It would take a
6	little bit of time but, yes, I could write some scripts
7	to parse the data to map exactly where users were, you
8	know, over time.
9	Q. Okay. But you haven't attempted that at
10	this at this point?
11	A. I wasn't asked to.
12	Q. And could you do it even if the region field
13	was not populated for a substantial portion of the
14	entries?
15	A. I think I guess it depends what other data
16	is in those entries.
17	Q. Is there any other data that's in the fields,
18	in Figure 2, that would allow you to determine whether a
19	user is in any given state?
20	A. As I said
21	MR. PRICE: Object to form.
22	THE WITNESS: As I said, I don't know. Based
23	on my experience with this, I pulled out some examples
24	of fields where the you know, based on the name and
25	the value there, the purpose was obvious. But as you
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1 as you established, there are many here that I don't really know definitively what they represent. So it's 2 possible there is other data in there that could be used 3 to determine location. But we also know that this data in conjunction 5 with other datasets could be used to do that, as well. 6 And also, this doesn't even consider whether the IP 7 address was captured. So, you know, for every transmission on the Internet, the recipient gets the IP 9 10 address of the center and so, you know, if that's saved, even just in the course of standard logging, you could 11 12 go back and use those IP addresses to get an approximate 13 location for every user in the dataset. BY MR. BROOME: IP address is often not a 14 Q. reliable indicator as to where somebody is actually 15 located; right? 16 17 MR. PRICE: Object to form. 18 THE WITNESS: It varies. It varies, and it 19 really depends on the circumstances. For mobile devices, it's actually pretty 20 effective. 21 BY MR. BROOME: Did you attempt to combine the 22 Ο. 2.3 Localytics data with any other data for purposes of determining or confirming your assertion that the data 24 could be used to identify how many unique users were 25

1 Do you see that? 2 Α. Yes. Okay. What identifier -- when you say "these Ο. identifiers," which identifiers are you referring to? 4 So on the previous page, the user uuid, device 5 uuid, those are all unique identifiers of the user. And 6 so, again, this is an Android device. This appears to 7 be the Android ID, which is a unique identifier. And that's a field -- that's unique for every user's device. 9 And it's also a field that data brokers collect. 10 So when they collect other data from other 11 12 first and third parties, they key that data to the same 13 identifiers. And so just from this data that the TWC 14 app sends, that's linkable to data -- data -- profile data on users that are stored by other data brokers. 15 16 Do you know whether TWC makes any data 17 available to data brokers? 18 I have no idea what happens to the data after Α. TWC receives it. 19 Okay. So when you say you're "confident that 20 these identifiers are linkable to other persistent 21 identifiers collected previously and that user profiles 22 2.3 can be created that identify users -- identify individuals' physical locations over time, their 24 routines, relations, interactions and their preferences 25

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1 THE WITNESS: Based on my significant expertise in the area, I think it's -- it's a reasonable 2 assumption. But no, only your client -- only your 3 client knows for sure what that field means. And possibly Localytics does, as well, if this is where that 5 data came from. 6 Q. BY MR. BROOME: Did you review Dr. Snow's deposition transcript in preparing your report? 9 Α. I don't believe so. I don't believe I saw any 10 depositions. I don't believe -- I mean, I didn't -- in 11 preparing the report, no. But I don't know if at any 12 time -- again, my report is based entirely on just 13 reading their reports, both of those reports. 14 Whether I saw the deposition, either before or after, you know, I honestly don't -- I don't recall it. 15 16 But, you know, if I were told that I did -- I was sent 17 the deposition, it wouldn't surprise me. 18 In a second sentence on the top paragraph on Ο. page 4 you write, "For example, this data appears to 19 20 readily show how many users were located in a given state on a given day." 21 Do you see that? 22 2.3 Α. Yes. Are you aware that Dr. Snow testified that his 24 25 analysis indicated that the state field or the region Page 109

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1 field was missing, was not populated for approximately 60 percent? 2 Again, I -- I was not shown that. I saw a subset of the data. Yeah. So you have no basis to dispute that 5 6 then? Α. I have no basis to dispute that. MR. PRICE: Object to form. THE WITNESS: But, again, based on the previous 9 10 question, I think that is also kind of immaterial because there is sufficient data here -- you know, there 11 12 seems to be sufficient data for many of the users. 13 also, if 60 percent of the region data was missing, it's 14 not clear whether that means for 60 percent of the users or just 60 percent of the data points didn't have region 15 16 data. Maybe the app sends out the region data 17 periodically and not consistently. That would explain 18 that, but it also wouldn't -- it has no bearing on the ability to map, you know, where the users of the app are 19 located. 20 I am going to fill up my water five feet away. 21 I can still hear everything. 22 2.3 Ο. BY MR. BROOME: In the next sentence you write, "The version of the TWC app that was first used by any 24 given user correlates to one of the three permission 25 Page 110

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1 I don't think he makes that assumption. 2 there -- can you point me to a paragraph in his report where he makes that assumption? 3 That's the point of an event analysis is, you 4 Α. know, in analyzing the behavior after the event to see 5 if the event, you know, correlated with appreciable 6 change in the behavior. But in this case, if you don't 7 know who is exposed to the event, you can't really do 8 any sort of analysis. 9 10 You know that new users are very likely exposed to the event, so that could be what he's analyzing; 11 right? 12 13 Α. Maybe; maybe not. Because --14 Q. Do you know what he's analyzing? 15 Α. No. 16 MR. PRICE: Object to form. 17 THE WITNESS: Again, like that should have 18 been -- if he did control for all of these things, that should have been put in the report. But the report as 19 written, I don't know what he actually did. I was just 20 21 asked to review his report. And based on his report, these are my questions 22 2.3 about whether he did these things to correct for these, you know, potentially catastrophic confounding factors. 24 BY MR. BROOME: Well, one of the catastrophic 25 Q. Page 114

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1	THE VIDEOGRAPHER: We're back on the record.
2	The time is 1:17 p.m.
3	BY MR. BROOME:
4	Q. Dr. Egelman, in Section 2 of your report, which
5	is titled "background," from the last paragraph on
6	page 2 until the end of the section, you are offering
7	opinions, right?
8	A. Let me read them.
9	No. And there's no opinion in there.
10	The Snow's report there was data used to create
11	Snow's report. Not all of that data was shared with me.
12	That's a factual statement. Both of those are factual
13	statements.
14	I was told that the data some of the data
15	came from Localytics. That's another factual statement.
16	And that the app originated from the TWC app.
17	That's another factual statement. There's no opinion in
18	there.
19	Q. I think you might have misunderstood my
20	question.
21	I said, from the last paragraph on page 2 until
22	the end of the section.
23	A. Oh, sorry. Okay. So which opinion are we
24	referring to?
25	Q. Well, you say for example, on page 3, you
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say, "Based on my knowledge of the mobile app system and how data is transmitted between mobile apps and remote servers, this data appears to contain the following information." Right? That's one opinion and you list out the information, right?

A. Yes.

2.3

- Q. Okay. And then the paragraph on page 4 has several other opinions about identification of users and whether, you know, the data could be linked to them and used to create profiles, right?
  - A. Yes.
- Q. Which opinions of Dr. Snow's or Dr. Hanssens' are you responding to in offering those opinions?

MR. PRICE: Object to the form.

THE WITNESS: I'm putting those reports in context. So that's why this section is labeled "background," and, again, those aren't opinions I'm offering there. This is based on significant expertise, you know, and experience looking at, you know, mobile apps and third-party data recipients and how they transmit data. You know, based on that experience, this is -- and, you know, given the values and the labels on them presented here, you know, this is almost certainly what those correspond to.

1 BY MR. BROOME: Those are not opinions in paragraph 4? 2 Q. MR. PRICE: Object to the form. THE WITNESS: Paragraph 4? Sorry. 4 BY MR. BROOME: 5 6 I'm sorry, page 4, first paragraph. mistake. 7 Α. No, that is not opinion. Which part of that are you alleging is an opinion? 9 10 Well, really I mean the whole part. Let me take the statement. "Based on my experience and 11 12 expertise, I am confident that these identifiers are 13 linkable to other persistent identifiers collected 14 previously from other sources and that user profiles can be created that identify individuals' physical locations 15 over time, their routines, relations, interactions and 16 17 their preferences and interests based on other websites 18 and mobile apps that they use." Your view is that is not an opinion? 19 20 No. That's fact. I mean, these are unique persistent identifiers. This is how the whole mobile 21 app ecosystem functions. It relies on these identifiers 22 to be linkable across different data sources. 2.3 And so by putting, you know, the unique 24 25 identifier in here along side this data, that allows it Page 124

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1 to be used for these other purposes and combined with other data sources. That's absolutely fact. 2 Do you understand that when you -- when a fact is disputed and an expert is brought in to give their view as to which side has got it right, that is expert 5 opinion? 6 MR. PRICE: Object to the form. Outside the 8 scope. 9 THE WITNESS: I haven't heard any dispute about 10 what I've said here. I mean, this is my area of expertise, and I'm telling you that persistent device 11 12 identifiers allow this whole ecosystem to function and 13 this is how they're used in practice and, you know, if 14 this is data is what I'm told it is, then it could be used for these other purposes. 15 16 BY MR. BROOME: 17 So you didn't see anything in Dr. Hanssens' Q. 18 report or Dr. Snow's report that -- well, I mean -strike that and I'll ask it again. 19 You're not responding -- in the first paragraph 20 on page 4, you're not responding to any of the opinions 21 of Dr. Snow or Dr. Hanssens', correct? 22 2.3 MR. PRICE: Object to the form. BY MR. BROOME: 24 25 Q. Go ahead. Page 125

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1 made a different decision based on, you know, learning about the data being collected about them and how it 2 3 might be used. So understanding what that data is and how it 4 might be use is kind of fundamental to understand his 5 report in its totality. 6 Q. Which of Dr. Snow's opinions are you responding to in the first paragraph of page 4 of your report? Α. It contextualizes most of these. 9 10 Ο. Are you done with your answer? 11 Yeah, I guess. I mean, I don't really have 12 anything to add to that. 13 Do either Dr. Snow or Dr. Hanssens offer any Ο. 14 opinions about whether you could identify how many unique users were using TWC's app in a specified state 15 16 or region at any given time? 17 MR. PRICE: Object to the form. 18 THE WITNESS: You know, I would have to reread both reports but, again, as I already testified, the 19 reason I put that in there in the section labeled 20 "background" -- excuse me -- is that it's understanding 21 22 what data was collected and how it might be used is 2.3 fundamental to understanding what Hanssens and Snows did in their studies and that they documented in their 24 25 reports.

1 BY MR. BROOME: Right. But they don't offer any opinions about 2 whether you could identify unique users in a given state 3 or region, right? 4 MR. PRICE: Object to the form. 5 THE WITNESS: In understanding their opinions, 6 it's -- I think it's important to understand how they 7 formed those opinions. BY MR. BROOME: 9 10 Okay. How does that relate to the question that I just asked you? 11 12 MR. PRICE: Object to the form. 13 THE WITNESS: It relates because the -- sorry. 14 What was the question again? BY MR. BROOME: 15 Neither Dr. -- neither Dr. Snow nor 16 Dr. Hanssens offers any opinions about whether you can 17 18 identify a certain number of unique users in a given state or region, right? 19 Right. What I said was in understanding how 20 they arrived at that opinion, it's important to 21 understand what they actually did. So they document 22 2.3 data analysis that they did and, you know, a consumer survey that was performed in forming those opinions. 24 25 And so understanding what was actually being Page 128

1 (Exhibit Number 4 was marked.) BY MR. BROOME: 2 We're going to be working off your report, so Ο. we'll be focused on Exhibit 1 for now. 4 Α. Okay. 5 6 You write: "The Hanssens' report features a 7 survey in which participants were shown texts that was briefly used by TWC in the app. You'll get personalized 8 local weather data alerts and forecasts." And then you 9 10 write: "Disclosures in use during the majority of the app's existence were not examined and, therefore, this 11 12 survey's results cannot be generalized to those other 13 disclosures." 14 And in that second sentence there, you're saying that the survey's results with respect to testing 15 16 the language "You'll get personalized local weather data 17 alerts and forecasts cannot be generalized to the other 18 disclosure" meaning the -- you'll get accurate local weather? 19 20 Or any other. I mean, it's impossible to say whether people would express the same reaction to 21 different wordings. We went over this already. 22 2.3 Ο. Okay. And then under "Threats to Internal Validity, " you write: "The disclosure shown in the 24 survey were only in use by the TWC app for a fraction of 25

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2.3

the class period. Unlike other disclosures used by the app, e.g., we use your location to provide you with accurate weather data and forecasts, the disclosure chosen for the survey specifically used the word personalization." And then you say, "The survey's earlier focus on advertising may have primed respondents."

Are you connecting those two concepts there?

Are you saying that the words "personalization" would have primed respondents to focus on advertising?

A. Potentially. We don't know. That's why I wouldn't design the study like that. I mean, that's the issue. By using the word "personalization," it's possible that some subjects associate the term "personalization" with tailored advertising. That's not a reasonable leap.

And so by using the word, it's possible that some subjects were then thinking about advertising when they wouldn't have otherwise if they had simply, you know, been shown that dialogue in context and asked to make a decision in that moment.

Q. Okay. Even though the word personalized appears before local weather data, your opinion is that people may still associate the word "personalized" with advertising?

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1	MR. PRICE: Object to the form.
2	THE WITNESS: I think there is a difference in
3	understanding of the terms "personalization" and
4	"personalized local weather data." Yes, I suspect there
5	is a difference in how people would interpret those two
6	phrases but I also don't know definitively and that's
7	why it should have been evaluated.
8	BY MR. BROOME:
9	Q. Well, you could have evaluated it, right?
10	MR. PRICE: Object to the form.
11	THE WITNESS: I could have but I wasn't asked
12	to, so I didn't.
13	BY MR. BROOME:
14	Q. By the way, you say here, "The disclosure
15	chosen for the survey specifically used the word
16	'personalization'." The disclosure actually uses the
17	word "personalized" before "local weather data."
18	There's no material difference there, right,
19	that was just a typo, I suppose?
20	A. I think in the context of my report, that
21	was hang on. It doesn't say sorry, where is the
22	typo.
23	Q. Well, you under "3.1, Threats to Internal
24	Validity," about four lines down, you have
25	"personalization" in quotes?
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1 is a difference in how people would interpret those two phrases." 2 I'm wondering if you're assigning some special 3 meaning to the word "personalization" as compared to 4 "personalized." 5 I think context matters. 6 Α. So in the context that you're using it in your Q. report, which is just -- I think you're just quoting the prompt. 9 10 Α. Yes. My point is that either term, whether it's "personalized" -- so "personalized" or 11 12 "personalization," that might prime people to think 13 about tailored advertising. That's the only point I'm 14 making. And by using advertising in the question, it might be that people are associating the word 15 16 "personalized" or "personalization" or whatever word is 17 there. 18 Under Section 3, "Comments on Hanssens Report," Ο. in the third sentence down, you write: "Survey results 19 are confounded because responses were likely heavily 20 impacted by priming. Participants were asked 21 specifically about ads starting in the second question 22 2.3 of the survey. The first question was used for subterfuge and then threw out." 24 25 Do you see that? Page 135

1 Α. Yes. But there were 10 screening questions before 2 Q. the substantive questions, right? 3 Α. Were there? I need to pull up the survey then. 4 All right. Feel free to do that. You should 5 Ο. have it has Exhibit 4. 6 There was screening questions. Okay. I Α. Sure. don't see how that's particularly relevant to the point I made in the report. 9 Well, from the -- from the survey taker's 10 perspective, it's all just one big survey, right? 11 12 not like you did the screening questions and then now 13 you're going to do the survey? 14 I don't know -- I wouldn't say that having, you know, both experience conducting surveys and taking them 15 myself, that often it's pretty obvious where the 16 17 screening questions end and the actual survey begins. 18 So I wouldn't say that. Okay. But, I mean, do you know whether that's 19 the case with respect to this survey? 20 I think it's inconsequential. 21 Okay. I mean, you say in your report -- you 22 Q. 2.3 write that participants were specifically asked about ads starting in the second question of the survey, and 24 that's not accurate, right? 25

- 1 Α. Okay. So I was inacc -- so I was inarticulate The point is that this question came before any 2 there. of the other substantive questions in the survey. And 3 so, you know, if this were the last question of the 4 survey, that would be a different situation because 5 6 participants had already answered prior questions 7 without being explicitly primed to think about 8 advertising, whereas because this was essentially the first substantive question that came before the other 9 10 substantive questions, it tainted those results because participants were told to think about advertising right 11 12 off the bat. 13 Well, you're speculating that users were --Ο. 14 that it tainted the results. That's the whole point of a confounding factor. 15 16
  - A. That's the whole point of a confounding factor. If we knew the extent to which the results were tainted, we could correct for that and then it wouldn't be an issue. That's the whole point of a confounding factor, is we don't know -- this is a reasonable explanation, so we don't know the extent to which this impacted the results, which is why the results aren't reliable.

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21

22

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- Q. In fact, you don't know whether it impacted the results at all, right?
- A. That's the point of a confounding factor, is that this is -- you know, this is a significant concern

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1 because it could impact the results in a way that we wouldn't be able to know about or even measure, and 2 that's why it needs to be corrected for. 3 Right. And you could have tested yourself 4 Q. whether it had any impact all on Dr. Hanssens' results 5 but you weren't asked to do that, right? 6 MR. PRICE: Object to the form. THE WITNESS: I was not asked to do that. BY MR. BROOME: 9 10 But you easily could have tested whether what you call a confounding factor had any impact on 11 Dr. Hanssens' results? 12 13 MR. PRICE: Object to the form. Outside the 14 scope. THE WITNESS: I don't think I would have been 15 16 able to you know, exactly determine how that confounding 17 factor -- I would not be able to determine how it 18 impacted his prior survey, which is why it's a serious issue. I could, you know, design -- create a better 19 designed study to answer the question that he was 20 supposed to answer, sure, but that's -- again, that's 21 not what I was hired to do. 22 BY MR. BROOME: 2.3 In the same sentence you say that users were 24 asked specifically about ads in the second question of 25 Page 138

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1 think about advertising prior to answering those four 2 questions. Α. Yeah. So how -- before the first is -- when you say 4 those four questions, you're saying questions two, 5 three, four and five, right? So before they get to 6 question two, they're primed to think about advertising? 7 Before they put an answer to question two, 8 Α. immediately before providing an answer to question two, 9 10 they're asked about advertising. Okay. Okay. And you think that affected their 11 12 answers to questions four and five? 13 I think there's a possibility that it did. I 14 don't -- I mean, again, this is why it's a confounding factor. I don't know if and the extent to which it did 15 16 but a reasonable expert looking at this, you know, study 17 methodology would ask this question and this would not 18 be published in a reputable scientific conference because this is a serious methodological error. 19 And is there authority, like research that you 20 could have cited to support that opinion? 21 Α. About why your study should be free of 22 2.3 confounding factors? Supporting your opinion that the use of 24 25 the word advertising in question two would have primed Page 142

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1	what you're asking?
2	MR. PRICE: Object to the form.
3	THE WITNESS: Are you saying that it would be
4	disputed among experts as to whether priming is a
5	concern when conducting experimental research?
6	BY MR. BROOME:
7	Q. I think it would be disputed among experts
8	whether the use of the word advertising in question two
9	tainted the rest of the survey.
10	MR. PRICE: Object to the form.
11	THE WITNESS: I think whether it did is
12	certainly a source of speculation among experts, and
13	that's why the survey shouldn't be relied upon, because
14	that's un it's an unknown. We don't know the extent
15	to which that confounded the results.
16	BY MR. BROOME:
17	Q. So take a look at question four.
18	A. Okay.
19	Q. It says, "Suppose you want details about how
20	the free version of the Weather Channel App may use your
21	location data."
22	Which source, if any, will you consult?
23	A. Okay.
24	Q. How would the use of the word advertising in
25	question two and three taint respondents' responses to
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1 So to get -- to get a sample that is Okay. 2 representative of the class, in your view, users should not have been asked about The Weather Channel app, 3 whether they use The Weather Channel app? 4 5 MR. PRICE: Object to the form. I think ideally, no. I don't 6 THE WITNESS: 7 think a real -- I don't think that the survey should have been framed around a real app because this 8 introduces a potential source of bias. 9 10 BY MR. BROOME: 11 Okay. And that potential source of bias is 12 resolved in the robustness survey? 13 That potential source is resolved, yes, that Α. 14 people aren't being, you know, tested on -- that their 15 preconceived notions of The Weather Channel app aren't 16 necessarily impacting their responses. But there are 17 issues that we've already gone over with the robustness 18 survey. 19 All right. In the next paragraph, second --20 third sentence, you write: "The target population is not all users who can recall both using the TWC app and 21 22 granting it access to their location data but instead 23 should be TWC app users who were encountering the app's privacy disclosures for the first time and must make 24

them -- must use them to make decisions about their

25

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1	STATE OF CALIFORNIA )
2	) SS:
3	COUNTY OF LOS ANGELES )
4	
5	I, Monice K. Campbell, Certified Shorthand
6	Reporter, Certificate 14171, hereby certify:
7	I am the deposition officer that
8	stenographically recorded the testimony in the foregoing
9	deposition;
10	Prior to being examined, the deponent was
11	by me first duly administered an oath;
12	The foregoing is a true record of the testimony
13	given.
14	
15	Dated: July 23, 2022
16	170
17	Kylow, mgs
18	Monice K. Campbell, CCR No. 14171
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